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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/730,412	12/04/2000	Jae H. Shim	7015-006	7201

7590                    08/07/2003

LAW OFFICE OF JOHN SCHIPPER  
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[REDACTED] EXAMINER

VO, NGUYEN THANH

[REDACTED] ART UNIT      [REDACTED] PAPER NUMBER

2685

DATE MAILED: 08/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/730,412	SHIM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Nguyen T Vo	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:  
    1. Certified copies of the priority documents have been received.  
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
  a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ .                                   |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon (5,884,156) in view of Nakano (6,154,538).

As to claims 1, 12, Gordon discloses controlling operation of a radiotelephone comprising determining if a radiotelephone is activated for used (see column 4 lines 34-43 which discloses determining which mode of operation is activated); determining if the radiotelephone is within a selected proximity zone of a radiotelephone user (see column 3 line 49 to column 4 line 18). Grodon further discloses controlling the volume of the radiotelephone in response to whether or not the radiotelephone is within a

predetermined range (see column 3 line 49 to column 5 line 27). Gordon, however, fails to disclose estimating a distance  $d$  between the radiotelephone and the user, and adjusting a radiotelephone speaker volume control according to the estimated distance  $d$  as claimed. Nakano discloses estimating a distance  $d$  between the radiotelephone and the user, and adjusting a radiotelephone speaker volume control and a microphone gain control according to the estimated distance (see column 1 lines 16-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above teaching of Nakano to Gordon, in order to ensure that the user can hear the output from the speaker, and that the microphone can pick up the user's voice when the distance between the user and the radiotelephone varies.

As to claims 2, 13, see Gordon, column 5 lines 2-7.

As to claims 3, 14, the combination of Gordon and Nakano does disclose providing a minimum value and maximum value of the speaker volume (see Gordon, column 4 lines 44-50). The above combination also discloses varying the speaker volume with each estimated distance  $d$  (see Nakano, column 1 lines 16-25). The above combination, however, fails to disclose varying the speaker volume monotonically with the distance  $d$  as recited in the claim. Those skilled in the art, however, would have appreciated that as long as the applied references and the claimed invention all disclose varying the speaker volume with each estimated distance  $d$ , the above claimed limitation would not render the claim patentable over the applied references because it would merely depend on how one would like to control the speaker volume with respect to each estimated distance  $d$ . Therefore, it would have been obvious to one of ordinary

skill in the art at the time of the invention to modify the above combination of Gordon and Nakano, such that the speaker volume is adjusted monotonically with the estimated distance d, in order to provide the user comfort in listening the speaker output by gradually increasing or decreasing the speaker volume in response to the estimated distance d.

As to claims 4, 15, see Gordon, volume 3 lines 42-48.

As to claims 5, 16, the combination of Gordon and Nakano discloses the claimed limitations (see Nakano, column 1 lines 16-25).

As to claims 6-8, 17-19, the above combination does disclose adjusting the microphone gain control in response to the distance (see Nakano), but fails to disclose that the way the microphone gain control is adjusted is the same as that of the speaker volume control. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the above combination of Gordon and Nakano, such that the way the microphone gain control is adjusted is the same as that of the speaker volume control, in order to simplify the circuit design and operation.

As to claims 9, 20, see Gordon, column 3 line 58 to column 4 line 8.

As to claims 10, 21, see Gordon, column 3 line 58 to column 4 line 8. In this case, the indicium as claimed reads on the frequency and the strength of the infrared signal.

As to claims 11, 22, the above combination fails to disclose that the proximity sensor 20 compares a temperature of a selected surface with a threshold temperature of 32 degrees. The examiner, however, takes Official Notice that such a proximity

sensor is known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above conventional sensor to the above combination of Gordon and Nakano, in order to have a different way of detecting if the radiotelephone is within a predetermined range.

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dzung et al. (5,265,264) disclose controlling a speaker volume and a microphone gain in response to the distance between user and a radiotelephone (see column 3 lines 40-55).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T Vo whose telephone number is (703) 308-6728. The examiner can normally be reached on Monday-Friday and alternate Monday from 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (703)305-4385. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for all communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Nguyen Vo  
August 4, 2003



NGUYEN T. VO  
PRIMARY EXAMINER